



Contact characteristics

Number of poles	Nr.	3
Rated insulation voltage U_i IEC/EN	V	690
Rated impulse withstand voltage U_{imp}	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$	A	16
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 16
	AC-1 ($\leq 55^\circ\text{C}$)	A 14
	AC-1 ($\leq 70^\circ\text{C}$)	A 12
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 6
	AC-4 (400V)	A 3.3
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	230V	kW 1.5
	400V	kW 2.2
	415V	kW 2.4
	440V	kW 2.5
	500V	kW 3
	690V	kW 3
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 6
	400V	kW 10
	500V	kW 13
	690V	kW 18
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A 9
	48V	A 8
	75V	A 4
	110V	A 3
	220V	A –
	IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	$\leq 24\text{V}$
48V		A 11
75V		A 7
110V		A 6
220V		A –
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series		$\leq 24\text{V}$
	48V	A 14
	75V	A 8
	110V	A 8
	220V	A 1
	IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	$\leq 24\text{V}$
48V		A 14
75V		A 8
110V		A 8

	≤24V	A	–
	48V	A	–
	75V	A	–
	110V	A	–
	220V	A	–
<hr/>			
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	≤24V	A	6
	48V	A	5
	75V	A	2
	110V	A	1
	220V	A	–
<hr/>			
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	≤24V	A	7
	48V	A	7
	75V	A	4
	110V	A	3
	220V	A	–
<hr/>			
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	≤24V	A	9
	48V	A	9
	75V	A	5
	110V	A	4
	220V	A	0,5
<hr/>			
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	≤24V	A	–
	48V	A	–
	75V	A	–
	110V	A	–
	220V	A	–
<hr/>			
Short-time allowable current for 10s (IEC/EN60947-1)		A	96
<hr/>			
Protection fuse	gG (IEC)	A	16
	aM (IEC)	A	6
<hr/>			
Making capacity (RMS value)		A	92
<hr/>			
Breaking capacity at voltage	440V	A	72
	500V	A	72
	690V	A	72
<hr/>			
Resistance per pole (average value)		mΩ	10
<hr/>			
Power dissipation per pole (average value)	Ith	W	2.6
	AC-3	W	0.36
<hr/>			
Tightening torque for terminals	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	Ibin	9
<hr/>			
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	Ibin	9
<hr/>			
Max number of wires simultaneously connectable		Nr.	2

Conductor section

AWG/Kcmil				
		max		12
Flexible w/o lug conductor section		min	mm ²	0.75
		max	mm ²	2.5
Flexible c/w lug conductor section		min	mm ²	1.5
		max	mm ²	2.5
Flexible with insulated spade lug conductor section		min	mm ²	1.5
		max	mm ²	2.5

Power terminal protection according to IEC/EN 60529

IP20 when properly wired

Mechanical features

Operating position

normal allowable Vertical plan ±30°

Fixing

Screw / DIN rail 35mm

Weight

g 220

Auxiliary contact characteristics

Thermal current I_{th}

A 10

IEC/EN 60947-5-1 designation

A600 - Q600

Operating current AC15

230V	A	3
400V	A	1.9
500V	A	1.4

Operating current DC12

110V	A	2.9
------	---	-----

Operating current DC13

24V	A	2.9
48V	A	1.4
60V	A	1.2
110V	A	0.6
125V	A	0.55
220V	A	0.3
600V	A	0.1

Operations

Mechanical life

cycles 20000000

Electrical life

cycles 500000

Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	cycles	500000
mechanical load	cycles	20000000

Mirror contacts according to IEC/EN 60947-4-1 annex F

Yes

EMC compatibility

yes

DC coil operating

DC rated control voltage

V 60

DC operating voltage

pick-up

min	%U _s	75
max	%U _s	115

drop-out

min	%Us	10
max	%Us	25

Average coil consumption $\leq 20^{\circ}\text{C}$

in-rush	W	3.2
holding	W	3.2

Max cycles frequency

Mechanical operation

cycles/h 3600

Operating times

Average time for Us control

in AC

Closing NO

min	ms	12
max	ms	21

Opening NO

min	ms	9
max	ms	18

Closing NC

min	ms	17
max	ms	26

Opening NC

min	ms	7
max	ms	17

in DC

Closing NO

min	ms	18
max	ms	25

Opening NO

min	ms	2
max	ms	3

Closing NC

min	ms	3
max	ms	5

Opening NC

min	ms	11
max	ms	17

UL technical data

Rated operational voltage AC (UL)

V 600

Full-load current (FLA) for three-phase AC motor

at 480V	A	4.8
at 600V	A	3.9

Yielded mechanical performance

for single-phase AC motor

110/120V	HP	0.3
230V	HP	1

for three-phase AC motor

200/208V	HP	1.5
220/240V	HP	2
460/480V	HP	3
575/600V	HP	3

General USE

Contactors

AC current A 16

Short-circuit protection fuse, 600V

High fault

Short circuit current	kA	100
Fuse rating	A	30
Fuse class		J

Standard fault

Short circuit current	kA	5
Fuse rating	A	30

Contact rating of auxiliary contacts according to UL

A600 - Q600

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	+70

Storage temperature

min	°C	-60
max	°C	+80

Max altitude

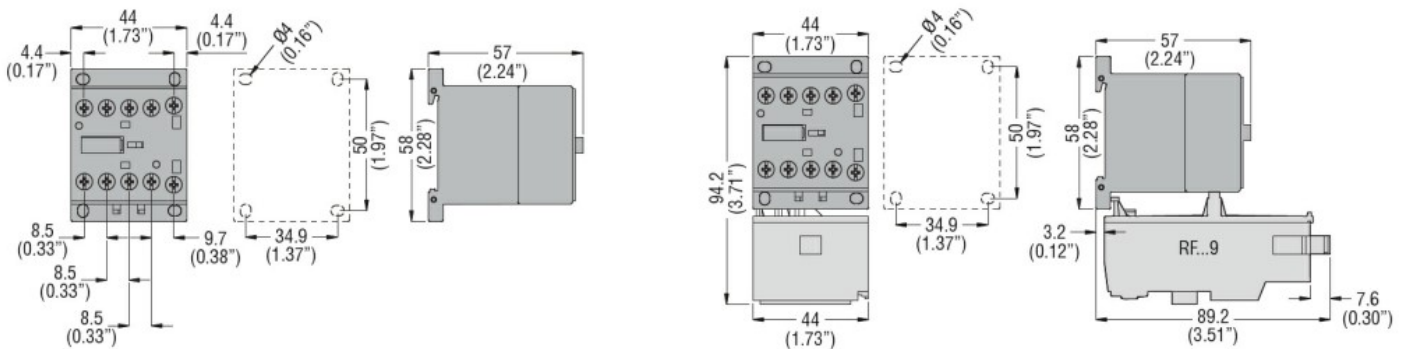
m 3000

Resistance & Protection

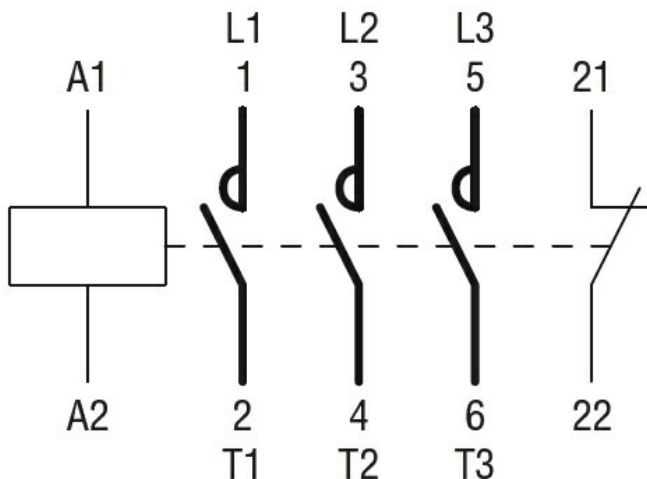
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

- CSA C22.2 n° 60947-1
- CSA C22.2 n° 60947-4-1
- IEC/EN 60335-2-89
- IEC/EN 60947-1
- IEC/EN 60947-4-1
- UL 60947-1

UL 60947-4-1

Certificates

CCC

CSA C22.2 n. 60335-2-40:22 LZGH A2L

CSA C22.2 No. 60335-2-89:21 LZGH A2L

cULus

EAC

UL 60335-2-40 LZGH A2L

UL 60335-2-89 LZGH A2L

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching